

**IN THE CLAIMS**

Please amend claims 32-38 as shown below. The following listing of claims replacing all previous listings:

1-31. (Canceled).

32. (Currently amended) An optical irradiation device comprising ~~one or more~~ a plurality of LEDs for emitting radiation, the ~~one or more~~ plurality of LEDs thermally connected to ~~one or more~~ a heat pipe[[s]], wherein ~~each of the one or more~~ all of the plurality of LEDs are proximate to ~~at~~ an end of ~~one of the one or more~~ the heat pipe[[s]], a unitary thermal connector directly connecting the ~~one or more~~ plurality of LEDs and the ~~one or more~~ heat pipe[[s]], said ~~one or more~~ heat pipe[[s]] conducting heat away from the ~~one or more~~ plurality of LEDs.

33. (Currently amended) The optical irradiation device according to claim 32 further comprising a fan or Peltier device proximate to the one or more heat pipe[[s]].

34. (Currently amended) The optical irradiation device according to claim 32 further comprising a heat sink in thermal contact with the ~~one or more~~ heat pipe[[s]].

35. (Currently amended) The optical irradiation device according to claim 33, further comprising a heat sink in thermal contact with the ~~one or more~~ heat pipe[[s]].

36. (Currently amended) The optical irradiation device according to claim 32, wherein the ~~one or more~~ heat pipe[[s]] provides a means for cooling the ~~one or more~~ plurality of LEDs such that the ~~one or more~~ plurality of LEDs are capable of being driven to produce more radiation than the ~~one or more~~ plurality of LEDs would be capable of without the ~~one or more~~ heat pipe[[s]].

37. (Currently amended) The optical irradiation device according to claim 32, wherein the ~~one or more~~ plurality of LEDs ~~comprise a plurality of~~ LEDs are formed into one or more clusters.

38. (Currently amended) The optical irradiation device according to claim 32, wherein the ~~one or more~~ plurality of LEDs ~~comprise a plurality of~~ LEDs are formed into one or more arrays.

39. (Canceled).